



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,045	07/31/2001	Ramesh Nagarajan	15-12	4258

30594 7590 03/27/2006  
HARNES, DICKEY & PIERCE, P.L.C.  
P.O. BOX 8910  
RESTON, VA 20195

EXAMINER

BLOUNT, STEVEN

ART UNIT PAPER NUMBER

2616

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/919,045

Applicant(s)

NAGARAJAN ET AL

Examiner

Steven Blount

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

A. The finality of the previous Office action is withdrawn in view of the rejections presented below.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 4 and 6 - 14 rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (hereinafter AAPA) in view of U.S. patent 5,465,379 to Li et al.

With regard to claim 1, AAPA states that when, in optical transport networks, a connection setup request is made (page 1, lines 20+), one of the problems that results is resource contention which occurs because cross connect requests are made for the same common link path at the same time, from alternate ends of the connection (lines 32+) which ties up wavelength ports. AAPA also teaches using signaling to set up a cross connect in line 21 of page 1. AAPA does not address the solution to this problem, however, by having neighboring nodes negotiate a predefined sequence to assign a link resource.

Li et al teaches using a cyclic permutation of the wavelengths to avoid this type of contention. See col 4 lines 28 – 45 and figure 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have used the signaling taught in AAPA to communicate a negotiated permutation of the wavelength assignments in a predefined sequence associated with the ports in the nodes of AAPA in light of the teachings of Li et al in order to provide a efficient means for avoiding contention on the connection between the said nodes when a communication signal is placed across the said connection.

With regard to claim 2, see figure 2 and col 4 and note the essentially tabular form of the data, and that it would be well within the ordinary skill in the art to place this data into an actual table in order to share it between the two nodes.

With regard to claim 3, the system of Li et al is optical.

With regard to claim 4, wavelengths are the resources.

With regard to claim 6, see the discussion of claims 1 and 2 above.

With regard to claim 7, wavelengths are the resource.

With regard to claim 8, see the rejection of claim 1 and note a processor would be required to perform the shifting operation described in col 4 lines 38+. Also note the use of the term "processing module" in this paragraph.

With regard to claim 9, note the discussion of a table above, and the mention of ports in AAPA.

With regard to claim 10, note the system is optical.

With regard to claim 11, note wavelengths are used.

With regard to claim 12, see the rejection of claims 1 and 8 and note that the means plus function limitations described in the specification are all met in Li et al.

With regard to claims 13 – 14, see the rejections above.

7. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include the limitations of the base claim and any intervening claims.

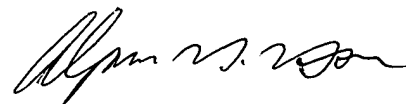
8. Of the prior art cited on the PTO-892, the examiner notes USPN 5699177 in particular.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 – 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB  
  
2/28/06



ALPUS H. HSU  
PRIMARY EXAMINER